

CLAIMS

I claim:

1. A bonded monostrand post-tension system comprising:
 - an anchor having a tubular extension extending therefrom;
 - a duct having a longitudinal axis, said duct having an interior passageway formed therein;
 - a coupler having a one end affixed to said tubular extension of said anchor and another end affixed to said duct; and
 - a single tendon secured to said anchor and extending through said duct and said coupler.
2. The system of Claim 1, said coupler having a first internal thread at one end and a second internal thread at another end, said first internal thread engaged with said tubular extension of said anchor, said second internal thread engaged with an exterior surface of said duct.
3. The system of Claim 2, said duct having a corrugation extending outwardly therefrom, said second internal thread affixed to said corrugation.
4. The system of Claim 2, said anchor having a polymeric encapsulation extending thereover, said tubular extension being formed by said polymeric encapsulation, said first internal thread being self-tapped onto said tubular extension.
5. The system of Claim 1, said one end of said coupler being in interference-fit relationship with said tubular extension, said another end of said coupler being in interference-fit relationship with said duct.

6. The system of Claim 1, said duct being a tubular body having a plurality of corrugations extending outwardly therefrom along an exterior surface thereof, each of said plurality of corrugations being in spaced relationship to an adjacent corrugation, said another end of said coupler being engaged onto one of said plurality of corrugations.

7. The system of Claim 6, said duct having a first longitudinal channel extending along an entire length of said duct and between adjacent pairs of the corrugations, said duct having a second longitudinal channel extending along an entire length of said duct and between adjacent pairs of the corrugations, each of said first and second longitudinal channels having an end opening interior of said coupler, each of said first and second longitudinal channels and each of said plurality of corrugations opening to said interior passageway of said duct.

8. The system of Claim 1, said coupler having an interior passageway extending between the ends thereof, said coupler having an inlet opening to said interior passageway of said coupler, said inlet positioned between the ends of said coupler.

9. The system of Claim 8, further comprising:

a grout tube affixed to said inlet, said grout tube extending outwardly of said coupler.

10. The system of Claim 9, said inlet having a threaded connection formed therein, said grout tube having an end threadedly received within said threaded connection.

11. The system of Claim 1, said tendon having an end extending outwardly of an end of said anchor opposite said coupler, the system further comprising:

a pair of wedges in interference-fit relationship between a surface of said tendon and an inner wall of a cavity formed in said anchor; and

a cap affixed to said anchor and extending over and around said end of said tendon.

12. The system of Claim 1, further comprising:

a grout material filling an interior of said duct and around said tendon therein.

13. The system of Claim 1, said coupler having a wide diameter portion extending over an end of said duct and a narrow diameter portion extending over said tubular extension of said anchor.

14. An anchor assembly for a bonded monostrand post-tension system comprising:

an anchor having a tubular extension extending from one end thereof ; and

a coupler having a first end affixed over said tubular extension in

interference-fit relationship therewith, said coupler being axially aligned with a longitudinal axis of said tubular extension, said coupler having an interior passageway extending therethrough.

15. The assembly of Claim 14, said coupler having an internal thread formed at said first end, said anchor having an encapsulation extending thereover, said encapsulation forming said tubular extension, said internal thread engaged with said tubular extension.

16. The assembly of Claim 15, said tubular extension being unthreaded, said internal thread self-tapping onto said tubular extension.

17. The assembly of Claim 14, said coupler having a second end formed opposite said first end, said second end having an internal thread formed therein.

18. The assembly of Claim 17, said coupler having an inlet passage in communication with said interior passageway thereof, said inlet passageway positioned between said first and second ends of said coupler, said inlet passageway having a connection area formed therein.

19. The assembly of Claim 18, further comprising:

a grout tube having one end received within said connection of said inlet passageway, said grout tube extending outwardly therefrom.

20. The assembly of Claim 18, said inlet passageway having a longitudinal axis extending transverse to said interior passageway of said coupler.